



## Exploring Various Robotic Control System and Its Utilization

<sup>1</sup>\*M. Mariselvam@Monisha, <sup>1</sup>M. Thirumal, <sup>2</sup>N. Patchi Raja, <sup>1</sup>M. Ramachandran, <sup>1</sup>Vidhya Prasanth

<sup>1</sup>REST Labs, Kaveripattinam, Krishnagiri, Tamil Nadu, India.

<sup>2</sup>PSN Institute of Technology and Science, Tirunelveli, India.

\*Corresponding author Email: [mariselvammonisa@gmail.com](mailto:mariselvammonisa@gmail.com).

**Abstract.** The robot, any self-propelled machine that modifies human effort, does not resemble humans in appearance or perform human-like functions. Robotics, design, construction and use of machinery traditionally robots have been widely used to perform manual and repetitive tasks in industries such as automobile manufacturing, and to manufacture and assemble robots in industries where humans have to perform hazardous work. Contexts: Widely used in assembly, transportation, earth and space exploration, surgery and weapons. Robots eliminate jobs that are dangerous to humans because they are capable of working in hazardous environments. They can handle heavy loads, toxic substances and repetitive tasks. This helps companies prevent many accidents and saves time and money. Until they get tired, they can do the same thing over and over again. They are very precise - up to fractions of an inch, for example, in a microelectronic product that requires a man-like machine and performs mechanical, routine tasks on command. A mechanized, usually responsive person. Subject to the will of another; the control system of the automaton robot uses concepts similar to the human brain. It runs your computer.

**Key words:** Robot control, Control function, Control application, Emotion recognition.

### 1. Introduction

The robot control system contributes to the movement of robots. Descendant Mechanical Pictures and Programming Systems That Make It Possible to Control Robots. Semi-autonomous and fully autonomous, manual control, wireless control. Today, as technological advances progress, robots and their control systems are constantly being improved and improved. This handheld device has buttons, switches or a touch screen that allow you to enter programming commands. These commands are entered by a robot operator through the keyboard of the medal. Once the program enters the Teaching Medal, the controller sends coded instructions to the robot's CPU.

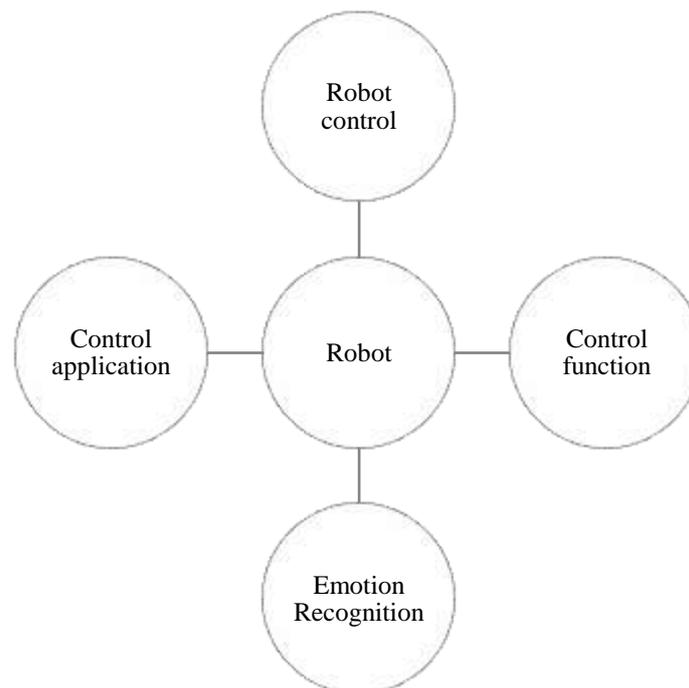


FIGURE 1. Robot

A function that controls the recording or processing or transmission of data interpretation. Synonyms: control function. The control function identifies these areas and leads to refined targets in the future. For example, you may decide to do carpool next month to save on transportation costs or to earn more for transportation by working extra hours. Assist bank employees in enforcing board and management orders. At every business level across the bank. These measures help to stabilize it. The Board and Management Act enables a company to define and apply the most sophisticated security and network routing policies based on a specific resource, which is uniquely designed to identify the traffic of various applications within the network to control the risks that may prevent the bank from using it. Application controls can be classified as Input controls, output controls and processing controls. The input controls check the printer and completeness of the data when entering the system. Application control is the process of controlling applications running on computer devices, preventing applications from operating in the event of a threat to operating system security, and Process data sensor recognition that recognizes human emotions. People vary widely from their accuracy in recognizing the feelings of others. The use of technology to assist those with emotional recognition is a relatively new area of research. In general, technology works best when used multiple times in the environment. Emotional recognition brings benefits to many organizations and aspects of life. It is useful and important for safety and health purposes. Also, it is very important to find human emotions easily and simply without asking at a particular moment.

## 2. Robot Control

Robot control is an important skill for robot manufacturers, and many advances have been made to enlarge the robot performance, less robot cost, and introduce new functions. Multi-robot control, security control, force control, remote robot surveillance and wireless communication are some of the areas that are being developed. Examples attract attention today. The benefits of using these upgrades and technological challenges by robot manufacturers are discussed. Model-based control is now an important technology for controlling industrial robots and models, Control programs are constantly being refined to meet higher performance requirements. Future development robots can be. For example, new robot applications in the automotive industry, especially the final assembly, small and medium enterprises, Found in foundries, food industry and processing and assembly. Larger structures are robot control and then robot Drive control is very specific to the robot product and is one of the most important skills for development. Industrial Robotics, Advanced Continuing to improve robot performance by using and improving control Possible, it is necessary to increase the efficiency and low cost of industrial robot automation. Effective mobile robots regulate a real-time controller with a range of possibilities in addition to control theory. These include status assessment, mapping and tracking, human interfaces, quick communication, multiple customer support and vehicle level monitoring for security and adjustment. This architecture is designed and implemented to support these capabilities, and robot control arises in planning and illustrates image and boundary data to avoid paths and obstacles. Due to their complexity, it is sensible to keep one of the clients and run client are responsible for these tasks are out of control on powerful computers. The software interface server is the contact link that provides this capability. Robot control at the operating and operating level. There, in a model Sacrifice Essence informative about the behavior obviously the environment and the influence of an agent this tissue environment. In the Contest Model-Fast Learning Control, Look at the Model Frame Three Different Perspectives. First we need to study the different model learning structures of robotics. Second, we discuss what kind of issues this architecture and robotics domain represents for compatible learning methods. From this discussion, we draw the future directions of real-time learning methods. Third, we show that these scenarios have long been used successfully in robotic control in a number of cases. The main use of learning forward models is to improve control problems. In this scenario, the principle that would be optimal for a hand-crafted model is that the larger the model errors, the more expensive it is to upgrade to a real computer. The policy is based on optimization Learning is an interesting alternative to forward models. Robot control is an important skill for robot manufacturers, as well as robot performance Lots of improvements to increase, reduce robot cost and introduce new functions have been made. Multi-robot control, secure control, force control, 3D vision, remote robot monitoring and wireless communication Examples of areas of development that are receiving great attention today. Of the application of these improvements Advantages and technical challenges faced by robot manufacturers are discussed. The robot Control depending on the heat and fatigue load of the robot for the specific project the robot is doing is optimized. The main conclusion of the presentation is that the development of the industrial robot is its is far from the limits and most of the robot automation in the industry It requires a lot of research and development to be widely used. In the early generation of robot control, the dream of intelligent robots that can be achieved by humans while robotics was interested in seeing the best achievements of modern control theory many say that robot control will soon be accomplished by applying it to robots Accepted. Humans can handle things. Easily and efficiently, when they stuff their luggage or eat with a knife and fork.

## 3. Control Function

The control function of the process can often be justified "Plug-in" approaches to situations to create spontaneous evaluators of parameters and area effects Known. In general, the assumption is less than the maximum probability for control functional approaches Is required, and the control operating modes are mathematically simpler. Some of the recent focus on estimating average area effects recommends simple, flexible parameter control operation techniques, with concise conclusions about non-parameter identification. Distinctive EEV in nonlinear models The control operational approach to weed control is highly controversial but approximate solutions are available. A control function is closely linked to assumptions a "minimal"

or "non-confusing" treatment process. Current robot control based on artificial intelligence and image processing technologies, everyday Has reached the limit of ensuring that the robot operates in environments because the existence of various objects is real world Makes it very difficult to identify. To deal with this problem, called a robot system We proposed a new concept, which could be as complex as a restaurant or office Knowledge for autonomous robot movement is distributed in contexts. The A series of information and knowledge stored in advance in a separate object and database and the information and knowledge distributed Integrated with the RFID tag, an information mediator, when a new event is activated. Every RFID The tag has its own network address, which allows a robot to download material information over the network. Activates. This program allows a robot to identify objects very easily and accurately. Robot The controller can be used as a transmission element. Remember that complication connected with testing behavioral relationships under arbitrators requires more Trial and error to achieve desired situational answers. Common behavioral structures this section discusses how the integrated behavioral framework used to create is used Describes: sub, motor schema, circuit architecture, action selection, and colony architecture and application fusion. Each subsection provides a brief summary of the structure and the robot code described in section Demonstrates its implementation in the context of an upstream binding factor with limited behaviors for simulation. The goal is to demonstrate that every architecture can achieve a common interface, with autonomous robot systems Allows creators. Selecting and using the most appropriate by flexibility to adapt to current environmental conditions behavioral framework.

#### 4. Control Application

Novel Drug Delivery System assists "subscriptions" Based on communication. In this application, other information sharing models are described Subscriptions having some basic advantages over. Novel drug distribution system Provides clear semantics, supports and guarantees multiple upgrade rates. The implementation of Novel Drug Delivery System uses the decay state internally to make sure almost "unstable" and inherently powerful communications. It the controller is integrated into the real-time programming framework and is a two-armed robot Used in many applications, including system control. The self robot was developed as a research platform that controls the robots entire body. The internal position of the robot can be measured by motor level and dark sensors and two Inertial Measurement Units on the shaft and head Key / Tour sensor glasses provide motors to assess the robot's stability, and integrate stereo cameras and RGB-D sensors for research on automated navigation and manipulation The system consists of four main components there are the User interface, planner, dual-arm robot control and sensor system and On-line simulator. The graphical user interface provides high level navigation. Planner, during combat single and double movement and hunting, creates a complete one-line presence for OP desi orders of assets through the process.

#### 5. Emotion Recognition

Recognizing emotions Speech has been an important part of research in recent times. In this regard, emotional speech will be in the process Reviewing assignments is convenient for further research. Recent Literature on Speech Emotion Recognition, Emotional Speech Corpora, Different Types of Speech Features and presented in consideration of issues related to the models used to recognize emotions from speech. Thirty-two delegate speeches Databases are reviewed, including emotional speech used in emotional speech recognition Issues related to databases are briefly discussed in terms of emotional recognition, considering the different types of emotional speech corpora. Creating emotional recognition systems that are isolated from different aspects of speech, to identify emotions Classification models used. At the end of the paper are some directions for further research on speech emotion recognition has been discussed. In determining properties such as scaling, generalization, and reliability of developed systems Emotional recognition plays an important role. To create emotional systems Most of the emotional speech databases used is small. Emotional recognition reaches its peak in both worlds - It directly measures the interaction of sensory and physiological signals, but the user has to carry sensors in his body. No need. The design uses radio frequency signals to sense emotions. Industry and Research Emotional recognition for both the community is very interesting. To build machines that sense our emotions If possible, such machines will run smart homes and adjust lights or music to suit our mood. The computer system of EQ-radio consists of three components are there, the The first component is the frequency modulated carrier wave radio, which is the radio frequency Sends signals and receives their reflections. Ref Basic Uses the radio approach. Next, the resulting RF signal is above The described beat will be sent to the extraction algorithm. Sensitivity perception is on par with sophisticated ECG-based systems that require physical sensors.

#### 6. Conclusion

Robot control is an important skill for robot manufacturers and to increase robot performance, robot A lot of improvements have been made to reduce costs and introduce new ones. Functions. The advantages of using these improvements and the technical challenges faced by robot manufacturers are discussed in the Control Function methods for solving the problem of endogenous descriptive variables in linear and non-linear models. "Plug-in" approaches randomize parameters and area effects Control operating methods are often used in situations known to create evaluators Can be justified. Usually, the control function is the maximum for the approaches Less assumptions are required than probabilities, and control function methods are computational methods. Recent focus on estimating average area effects suggests some simple, fl exile parametric Control Function techniques, with theoretical conclusions about non-criterion identification. The

Control Function approach to dealing with unique EEVs in nonlinear models are highly controversial, but approximate solutions control function for decades is part of the Economic Dictionary, but its approximate use and evolution has evolved. Early In works - especially Barno, Cain and Goldberger - a control function is a variable that, when combined with a regression, the policy variation changes completely externally. From the BCG perspective, a policy variable and one or more regressions involving regulatory functions provide a consistent assessment of the causal effect of a policy intervention. Novel Drug Delivery System supports "subscriptions" as a basic communication tool. Subscriptions halve Data delay and availability of query / response type samples Allows syncing of information quickly generated. Novel Drug Delivery System supports multiple sources of information and users. It provides a clear definition of multi-manufacturer conflict resolution supports and guarantees multiple upgrade rates. Recognition of emotions from speech is an important part of research in recent times Has formed. In this regard, in the process of emotional speech reviewing existing work may be useful for further research

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